Commonwealth of Virginia's Communications Interoperability

The Status of the Technical Standards Development Process & the Potential Impact on Virginia's Practitioners

Guest Speakers and Panelists

- Steve Souder
  - Fairfax County -Department of Public Safety Communications
- Dorothy Spears-Dean
  - Virginia Information Technologies Agency (VITA)
- Dereck Orr
  - National Institute for Standards and Technology

IAT Report Out

#4: Develop and promote technical standards and operational protocols

Tasks from FY 06 Strategic Plan:

- Review national standards for guidance in the development of statewide standards and protocols that include NIMS and FCC narrowbanding requirements 2011/2013
- Provide technical standards and operational protocols for use in RFPs
- Utilize CAPRAD to promote technical standards and operational protocols
  - Provide a link to CAPRAD on the website
  - Set up an opportunity for a CAPRAD representative to speak at the Statewide Interoperability Conference

IAT 4 Membership

Name	Organization
PMO Facilitator: Anthony Macri	Commonwealth Interoperability Coordinator's Office
Lead: Dorothy Spears Dean	Virginia Information Technologies Association
Andy Davis	Senior Resource Manager - Motorola
Constance McGeorge	Office of Commonwealth Preparedness
Craig Jorgensen	P25 Project Director
Dereck Orr	National Institute of Science & Technology
Donald Bowers	Fairfax County Fire & Rescue Department
Earl Sharp	Virginia Department of Transportation
Harry Yeomans	Manager, Microcomputer & Radio Comm. Systems
John Oblak	Vice President - EF Johnson
Luke Klein-Berndt	National Institute of Science & Technology
Steve Souder	Fairfax Department of Public Safety Communications
Steve Young	SRA International – SAFECOM Support
Terry Hall	VA APCO International
Thomas Struzzieri	STARS Project
Todd Pugh	County of Henrico, Communications Systems Manager
William Bullock	State Interoperability Advisory Group Chair

Methodology

The Delphi method was selected to obtain technical standards and operational protocols for interoperability from subject matter experts across local, state, federal & private entities

- Held interviews
- Distributed questionnaires
- Collaborative working sessions with stakeholders
- Identified capabilities and refined scope of initiative

Outline of Report

IAT 4's Report to the Advisory Group has 5 Sections

1. Local Perspective
    1. Hampton Roads Planning District – Harry Yeomans
    2. Northern Virginia Region (Fairfax County) – Capt. Don Bowers
2. State Perspective
    1. STARS/COMLINC Project – Thomas Struzzieri & Chris Essid
    2. RFP Guidance – Dorothy Spears-Dean
3. Federal Perspective
    1. P25 Update – Craig Jorgensen (P25 Project Director) & Dereck Orr (NIST)
    2. Upcoming SAFECOM Tools
4. Industry Perspective
    1. Lucent Technologies – Kenneth Budka
    2. Motorola – Andy Davis
    3. EF Johnson – John Oblak
    4. M/A COM – Robert Speidel
5. Standards & Operational Protocols Resource Library

Resource Library

	Technical Standards Development	Operational Protocols
Local		• NCR MIR MOU • NCR Radio Cache Deployment Procedure • Fairfax Documents • HRPDC Documents (Pending)
State		• COMLINC MOU • STARS/COMLINC Operational Protocols (Proprietary Till Final)
Federal	• P25 Memo Inviting VA to Participate • Statement of Requirements • PSAF Vol. 1 & 2 • Standards Lifecycle • SAFECOM Grant Guidance	• TIA Documents
Industry	• Position Statements from Motorola, EF Johnson & M/A COM	
International	• European TETRA Standard • European TETRA MOU	

Local Findings

- Develop statewide operational guidelines from existing resources
- Recognition of importance of backward compatibility to maintain interoperability
- Advanced localities operating at APCO level 5 of interoperability recognize the need to maintain capabilities within levels 1 – 4 to facilitate an incident beyond their region

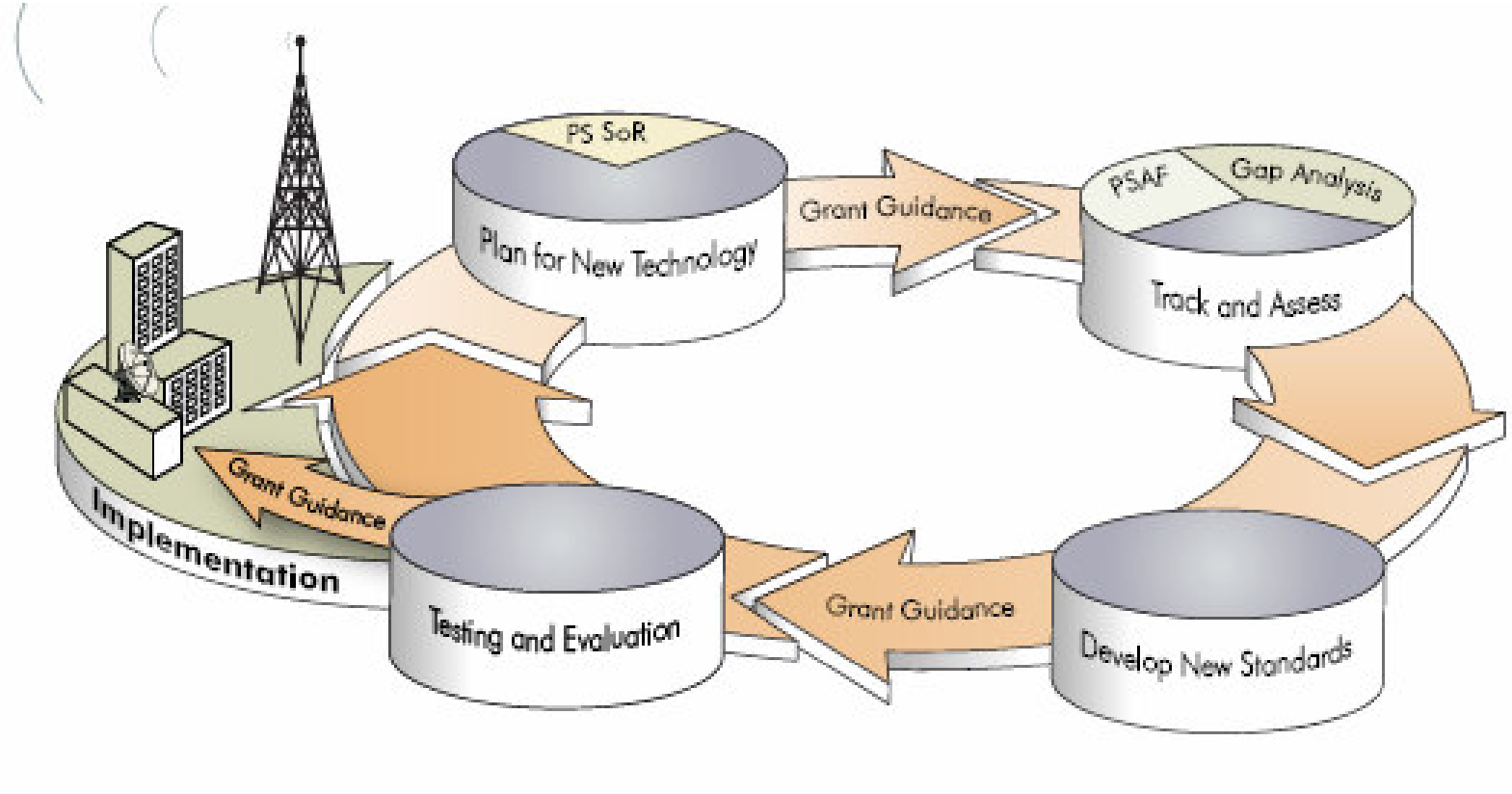
Local Findings

- STARS/COMLINC will play a limited role in true first-responder interoperability beyond a communications path for state resources to a locality. Linkage to the state is only a piece of regions interoperability requirements
- STARS needs to increase understanding of local jurisdictional needs to better market to localities and regions

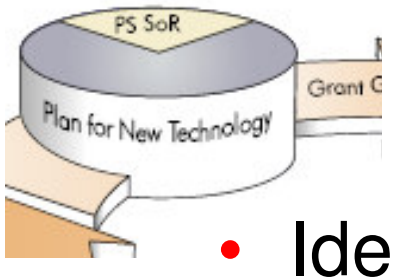
State Findings – STARS

- The STARS contract will provide essential public safety grade communications that can operate seamlessly throughout the Commonwealth for 21 state agencies and facilitate interoperability with local and federal government agencies
- STARS will provide a Project 25 multi-channel trunked digital voice and data wireless communications system that is specifically designed for public safety requirements

Federal Findings



Phase 1: SOR



The SOR provides the following information to the public safety community:

- Identifies operational and functional communication needs of public safety by public safety
- Offers a foundation for future planning by identifying near-term and long-term system and technical requirements
- Provides industry with information necessary to better align its research and development of evolving technologies

How can First Responders use the SoR

- A tool to assist in identifying specific communications requirements for their jurisdiction
- Updated periodically as technology and requirements evolve
  - Emergency Responders can use the document as a vehicle for publicizing their jurisdiction's communications requirements as needs change over time

Public Safety Architecture Framework

Purpose of the Public Safety Architecture Framework (PSAF)

- The PSAF helps to identify gaps in public safety operational and functional needs
- It will help engineers and planners document their public safety communication capabilities and analyze their system in relation to other systems

How is the PSAF organized?

Volume 1 provides a high level overview of the entire PSAF and its parts;

- ***Volume 2*** offers details on the three views of the PSAF
  - **The Operational View** shows how public safety performs its mission.
  - **The Systems View** shows the systems of equipment and the flow of information that support public safety.
  - **The Technical Standards View** shows the standards, technical rules, and guidelines that allow these systems to interoperate.

- ***Volume 3*** provides user-centric material such as how to apply the methodology and use the supporting PSAF tool. (Not Yet Developed)

Develop New Standards

The following is a sample list of some of the organizations SAFECOM is working with to define standards:

- National Incident Management System
- NIJ – CommTech Program
- National Public Safety Telecommunications Council (NPSTC)
- Association of Public Safety Communications Officials
- National Institute of Standards and Technology (NIST)
- Emergency Interoperability Consortium

Test & Evaluate

As technologies and standards are channeled through the testing & evaluation process, the focus will be to ensure:

- Standards and technology satisfy SoR requirements
- The chosen standard is practical and cost effective
- Products comply with identified standards
- Interim solutions meet immediate needs

- A National Voluntary Lab Accreditation Program is being established to accredit independent labs to test and evaluate equipment in effort to verify whether commercially available products comply with specific standards.

Recommendations For Tech. Standards

1. Promote the technical standards development process and IAT resource library via the CICO website
2. Support the federal technical standards development process

Recommendations For Tech. Standards – STARS

3) Hire a technical and marketing consultant within the CICO to promote and coordinate COMLINC. The consultant will:

I. Create collaboration and increase communication between STARS Project Management Team, SIEC, VITA, and localities

II. Determine and promote how COMLINC will assist localities in attaining interoperability

III. Work with STARS to develop a generic COMLINC RFP to aid localities with purchasing compatible equipment and systems

IV. Minimize duplication of efforts

Recommendations For Operational Protocols

4. Encourage practitioners to become NIMS certified by September 30, 2006
   - Beginning October 1, 2006 all federal preparedness funding will be conditioned upon full compliance with NIMS
5. Identify and develop statewide wireless communication protocols to coordinate existing local response plans and operational protocols

Recommendations For Operational Protocols

6. Provide support to localities to address FCC Narrowbanding requirements
7. Promote successful examples of operational protocols documented within the resource library via the CICO website

Status of Technical Standards Development

QUESTIONS?